

Claim 10
10. (Once amended.) An isolated antibody which specifically binds to a polypeptide selected from the group consisting of:

- a) a polypeptide comprising the amino acid sequence of SEQ ID NO:3,
- b) a polypeptide comprising a naturally occurring amino acid sequence at least 90% identical to the amino acid sequence of SEQ ID NO:3,
- c) a biologically active fragment of a polypeptide comprising the amino acid sequence of SEQ ID NO:3, and
- d) an immunogenic fragment of a polypeptide comprising the amino acid sequence of SEQ ID NO:3.

Claim 29
29. (Once amended.) A diagnostic test for a condition or disease associated with the expression of RCN in a biological sample, the method comprising:

- a) combining the biological sample with an antibody of claim 10, under conditions suitable for the antibody to bind the polypeptide and form an antibody:polypeptide complex; and
- b) detecting the complex, wherein the presence of the complex correlates with the presence of the polypeptide in the biological sample.

30. The antibody of claim 10, wherein the antibody is:

- a) a chimeric antibody,
- b) a single chain antibody,
- c) a Fab fragment,
- d) a F(ab')₂ fragment, or
- e) a humanized antibody.

31. A composition comprising an antibody of claim 10 and an acceptable excipient.

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32. (Once amended.) A method of diagnosing a condition or disease associated with the expression of RCN in a subject, comprising administering to said subject an effective amount of the composition of claim 31.

33. A composition of claim 31, wherein the antibody is labeled.

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34. (Once amended.) A method of diagnosing a condition or disease associated with the expression of RCN in a subject, comprising administering to said subject an effective amount of the composition of claim 33.

35. (Once amended.) A method of preparing a polyclonal antibody with the specificity of the antibody of claim 10 comprising:

- a) immunizing an animal with a polypeptide having the amino acid sequence of SEQ ID NO:3, or an immunogenic fragment thereof, under conditions to elicit an antibody response;
- b) isolating antibodies from said animal; and
- c) screening the isolated antibodies with the polypeptide, thereby identifying a polyclonal antibody which binds specifically to a polypeptide having the amino acid sequence of SEQ ID NO:3.

36. An antibody produced by a method of claim 35.

37. A composition comprising the antibody of claim 36 and a suitable carrier.

A5
38. (Once amended.) A method of making a monoclonal antibody with the specificity of the antibody of claim 10 comprising:

- a) immunizing an animal with a polypeptide having the amino acid sequence of SEQ ID NO:3, or an immunogenic fragment thereof, under conditions to elicit an antibody response;
- b) isolating antibody producing cells from the animal;
- c) fusing the antibody producing cells with immortalized cells to form monoclonal antibody-producing hybridoma cells;

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d) culturing the hybridoma cells; and
e) isolating from the culture monoclonal antibody which binds specifically to a polypeptide having the amino acid sequence of SEQ ID NO:3.

39. A monoclonal antibody produced by a method of claim 38.

40. A composition comprising the antibody of claim 39 and a suitable carrier.

41. The antibody of claim 10, wherein the antibody is produced by screening a Fab expression library.

42. The antibody of claim 10, wherein the antibody is produced by screening a recombinant immunoglobulin library.

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43. (Once amended.) A method for detecting a polypeptide having the amino acid sequence of SEQ ID NO:3 in a sample, the method comprising:

a) incubating the antibody of claim 10 with a sample under conditions to allow specific binding of the antibody and the polypeptide; and
b) detecting specific binding, wherein specific binding indicates the presence of a polypeptide having the amino acid sequence of SEQ ID NO:3 in the sample.

44. (Once amended.) A method of purifying a polypeptide having the amino acid sequence of SEQ ID NO:3 from a sample, the method comprising:

a) incubating the antibody of claim 10 with a sample under conditions to allow specific binding of the antibody and the polypeptide; and
b) separating the antibody from the sample and obtaining the purified polypeptide having the amino acid sequence of SEQ ID NO:3.